



NOT TO BE USED FOR TITLE V APPLICATIONS

PERMIT APPLICATION

APC 20

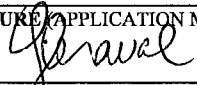
PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH EMISSION SOURCE. ATTACH APPROPRIATE SOURCE DESCRIPTION FORMS.

1. ORGANIZATION'S LEGAL NAME COLORTECH, INC.			/// FOR	APC COMPANY--POINT NO.
2. MAILING ADDRESS (ST/RD/P.O. BOX) 5705 Commerce Boulevard			/// APC	APC LOG/PERMIT NO.
CITY Morristown	STATE TN	ZIP CODE 37814	PHONE WITH AREA CODE (423) 587-0837	
3. PRINCIPAL TECHNICAL CONTACT Gildas Thoraval			PHONE WITH AREA CODE (423) 839-2750	
4. SITE ADDRESS (ST/RD/HWY) Same as above			COUNTY NAME HAMBLEN	
CITY OR DISTANCE TO NEAREST TOWN		ZIP CODE	PHONE WITH AREA CODE	
5. EMISSION SOURCE NO. (NUMBER WHICH UNIQUELY IDENTIFIES THIS SOURCE) Plant 2		PERMIT RENEWAL YES () NO (X)		
6. BRIEF DESCRIPTION OF EMISSION SOURCE Pneumatic conveying, blending, extrusion of color concentrate pellets for the plastics industry.				

7. TYPE OF PERMIT REQUESTED				
CONSTRUCTION ()	STARTING DATE X	COMPLETION DATE	LAST PERMIT NUMBER 968047P	EMISSION SOURCE REFERENCE NUMBER
OPERATING (X)	DATE CONSTRUCTION STARTED 3/1/2014	DATE COMPLETED 11/03/2014	LAST PERMIT NUMBER 968047P	EMISSION SOURCE REFERENCE NUMBER
LOCATION TRANSFER ()	TRANSFER DATE		LAST PERMIT NUMBER	EMISSION SOURCE REFERENCE NUMBER

ADDRESS OF LAST LOCATION

8. DESCRIBE CHANGES THAT HAVE BEEN MADE TO THIS EQUIPMENT OR OPERATION SINCE THE LAST CONSTRUCTION OR OPERATING PERMIT APPLICATION.
No changes made. Requesting Operating permit after completion of Construction

9. SIGNATURE (APPLICATION MUST BE SIGNED BEFORE IT WILL BE PROCESSED) 		DATE 12/10/2014
10. SIGNER'S NAME (TYPE OR PRINT) Gildas Thoraval	TITLE Director of Operations	PHONE WITH AREA CODE (423) 839-2750

(OVER)

TABLE OF POLLUTION REDUCTION DEVICE OR METHOD CODES
(ALPHABETICAL LISTING)

NOTE: FOR CYCLONES, SETTLING CHAMBERS, WET SCRUBBERS, AND ELECTROSTATIC PRECIPITATORS. THE EFFICIENCY RANGES CORRESPOND TO THE FOLLOWING PERCENTAGES:

HIGH: 95-99+%. MEDIUM: 80-95%. AND LOW: LESS THAN 80%.

IF THE SYSTEM HAS SEVERAL PIECES OF CONNECTED CONTROL EQUIPMENT, INDICATE THE SEQUENCE, FOR EXAMPLE:

008'010.97%.

IF NONE OF THE BELOW CODES FIT, USE 999 AS A CODE FOR OTHER AND SPECIFY IN THE COMMENTS.

NO EQUIPMENT	000	LIMESTONE INJECTION--DRY	041
ACTIVATED CARBON ADSORPTION	048	LIMESTONE INJECTION--WET	042
AFTERBURNER--DIRECT FLAME	021	LIQUID FILTRATION SYSTEM	049
AFTERBURNER--DIRECT FLAME WITH HEAT EXCHANGER	022	MIST ELIMINATOR--HIGH VELOCITY	014
AFTERBURNER--CATALYTIC	019	MIST ELIMINATOR--LOW VELOCITY	015
AFTERBURNER--CATALYTIC WITH HEAT EXCHANGER	020	PROCESS CHANGE	046
ALKALIZED ALUMINA	040	PROCESS ENCLOSED	054
CATALYTIC OXIDATION--FLUE GAS DESULFURIZATION	039	PROCESS GAS RECOVERY	060
CYCLONE--HIGH EFFICIENCY	007	SETTLING CHAMBER--HIGH EFFICIENCY	004
CYCLONE--MEDIUM EFFICIENCY	008	SETTLING CHAMBER--MEDIUM EFFICIENCY	005
CYCLONE--LOW EFFICIENCY	009	SETTLING CHAMBER--LOW EFFICIENCY	006
DUST SUPPRESSION BY CHEMICAL STABILIZERS		SPRAY TOWER (GASEOUS CONTROL ONLY)	052
OR WETTING AGENTS	062	SULFURIC ACID PLANT--CONTACT PROCESS	043
ELECTROSTATIC PRECIPITATOR--HIGH EFFICIENCY	010	SULFURIC ACID PLANT--DOUBLE CONTACT PROCESS	044
ELECTROSTATIC PRECIPITATOR--MEDIUM EFFICIENCY	011	SULFUR PLANT	045
ELECTROSTATIC PRECIPITATOR--LOW EFFICIENCY	012	VAPOR RECOVERY SYSTEM (INCLUDING CONDENSERS,	
FABRIC FILTER--HIGH TEMPERATURE	016	HOODING AND OTHER ENCLOSURES)	047
FABRIC FILTER--MEDIUM TEMPERATURE	017	VENTURI SCRUBBER (GASEOUS CONTROL ONLY)	053
FABRIC FILTER--LOW TEMPERATURE	018	WET SCRUBBER--HIGH EFFICIENCY	001
FABRIC FILTER--METAL SCREENS (COTTON GINS)	059	WET SCRUBBER--MEDIUM EFFICIENCY	002
FLARING	023	WET SCRUBBER--LOW EFFICIENCY	003
GAS ADSORPTION COLUMN--PACKED	050	WET SUPPRESSION BY WATER SPRAYS	061
GAS ADSORPTION COLUMN--TRAY TYPE	051		
GAS SCRUBBER (GENERAL: NOT CLASSIFIED)	013		

TABLE OF EMISSION ESTIMATION METHOD CODES

NOT APPLICABLE EMISSIONS ARE KNOWN TO BE ZERO	0
EMISSIONS BASED ON SOURCE TESTING	1
EMISSIONS BASED ON MATERIAL BALANCE USING ENGINEERING EXPERTISE AND KNOWLEDGE OF PROCESS	2
EMISSIONS CALCULATED USING EMISSION FACTORS FROM EPA PUBLICATION NO. AP-42 COMPILATION OF	
AIR POLLUTANT EMISSIONS FACTORS	3
JUDGEMENT	4
EMISSIONS CALCULATED USING A SPECIAL EMISSION FACTOR DIFFERING FROM THAT IN AP-42	5
OTHER (SPECIFY IN COMMENTS)	6



NOT TO BE USED FOR TITLE V APPLICATIONS

PROCESS OR FUEL BURNING SOURCE DESCRIPTION

APC21(& 24)

PLEASE TYPE OR PRINT, SUBMIT IN DUPLICATE AND ATTACH TO THE PERMIT APPLICATION.

1. ORGANIZATION NAME COLORTECH, INC.		/// FOR	APC COMPANY-POINT NO.
2. EMISSION SOURCE NO. (AS ON PERMIT APPLICATION)	SIC CODE	/// APC	APC PERMIT/LOG NO.
3. DESCRIPTION OF PROCESS OR FUEL BURNING UNIT Conveying, blending, extrusion & drying of color concentrate pellets			
4. NORMAL OPERATION: →	HOURS/DAY 24	DAYS/WEEK 7	WEEKS/YEAR 52
			DAYS/YEAR 365
5. PERCENT ANNUAL THROUGHPUT: →	DEC.-FEB. 25	MARCH-MAY 25	JUNE-AUG. 25
			SEPT.-NOV. 25
6. TYPE OF PERMIT APPLICATION			(CHECK BELOW ONE ONLY)
PROCESS SOURCE: APPLY FOR A SEPARATE PERMIT FOR EACH SOURCE. (CHECK AT RIGHT, AND COMPLETE LINES 7, 8, 13, AND 14).			(X)
PROCESS SOURCE WITH IN-PROCESS FUEL: PRODUCTS OF COMBUSTION CONTACT MATERIALS HEATED. APPLY FOR A SEPARATE PERMIT FOR EACH SOURCE. (CHECK AT RIGHT, AND COMPLETE LINES 7, 8, AND 10 THROUGH 14)			()
NON-PROCESS FUEL BURNING SOURCE: PRODUCTS OF COMBUSTION DO NOT CONTACT MATERIALS HEATED. COMPLETE THIS FORM FOR EACH BOILER OR FUEL BURNER AND COMPLETE AN EMISSION POINT DESCRIPTION FORM (APC 22) FOR EACH STACK. (CHECK AT RIGHT, AND COMPLETE LINES 9 TO 14)			()
7. TYPE OF OPERATION: CONTINUOUS, (X)		BATCH (X)	NORMAL BATCH TIME
8. PROCESS MATERIAL INPUTS AND IN-PROCESS SOLID FUELS		DIAGRAM* REFERENCE	INPUT RATES (POUNDS/HOUR) DESIGN ACTUAL
A. PE Resin Railcar Unloading			10,000
B. Blender, Extruder w/ baghouse			8,400
C.			
D.			
E.			
F.			
G.			
TOTALS			

* A SIMPLE PROCESS FLOW DIAGRAM MUST BE ATTACHED.

(OVER)

9. BOILER OR BURNER DATA: (COMPLETE LINES 9 TO 14 USING A SEPARATE FORM FOR EACH BOILER)

BOILER NUMBER	STACK NUMBER**	TYPE OF FIRING***	RATED BOILER HORSEPOWER	RATED INPUT CAPACITY (10 ⁶ BTU/HR)	OTHER BOILER RATING (SPECIFY CAPACITY AND UNITS)
BOILER SERIAL NO.		DATE CONSTRUCTED	DATE OF LAST MODIFICATION (EXPLAIN IN COMMENTS BELOW).		

** BOILERS WITH A COMMON STACK WILL HAVE THE SAME STACK NUMBER.

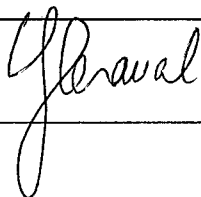
*** CYCLONE, SPREADER (WITH OR WITHOUT REINJECTION), PULVERIZED (WET OR DRY BOTTOM, WITH OR WITHOUT REINJECTION), OTHER STOKER (SPECIFY TYPE), HAND FIRED, AUTOMATIC, OR OTHER TYPE (DESCRIBE BELOW IN COMMENTS).

10. FUEL DATA: (COMPLETE FOR A PROCESS SOURCE WITH IN-PROCESS FUEL OR A NON-PROCESS FUEL BURNING SOURCE)

PRIMARY FUEL TYPE (SPECIFY)				STANDBY FUEL TYPE(S) (SPECIFY)			
FUELS USED	ANNUAL USAGE	HOURLY USAGE		% SULFUR	% ASH	BTU VALUE OF FUEL	(FOR APC ONLY) SCC CODE
		DESIGN	AVERAGE				
NATURAL GAS:	10 ⁶ CUFT	CUFT	CUFT	///	///	1,000	
#2 FUEL OIL:	10 ³ GAL	GAL	GAL		///		
#5 FUEL OIL:	10 ³ GAL	GAL	GAL		///		
#6 FUEL OIL:	10 ³ GAL	GAL	GAL		///		
COAL:	TONS	LBS	LBS				
WOOD:	TONS	LBS	LBS	///	///		
LIQUID PROPANE:	10 ³ GAL	GAL	GAL	///	///	85,000	
OTHER (SPECIFY TYPE & UNITS.):							

11. IF WOOD IS USED AS A FUEL, SPECIFY TYPES AND ESTIMATE PERCENT BY WEIGHT OF BARK**12. IF WOOD IS USED WITH OTHER FUELS, SPECIFY PERCENT BY WEIGHT OF WOOD CHARGED TO THE BURNER.****13. COMMENTS**

We are producing several hundred products, each of which can contain varying concentrations of polymer, fillers, pigments & additives. The data provided on line 8 represents the "worst case" or maximum input rates based on equipment capabilities. Actual rates are lower and depend on the product mix.

14. SIGNATURE

DATE

12/10/2014



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EMISSION POINT DESCRIPTION

APC 22

PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH STACK OR EMISSION POINT.
ATTACH TO THE PERMIT APPLICATION.

1. ORGANIZATION NAME COLORTECH, INC.				/// FOR	APC COMPANY POINT NO.		
2. EMISSION SOURCE NO. (FROM APPLICATION) P2-RUS-01		FLOW DIAGRAM POINT NUMBER		/// APC	APC SEQUENCE NO.		
3. LOCATION:	LATITUDE	LONGITUDE	UTM VERTICAL		UTM HORIZONTAL		
4. BRIEF EMISSION POINT DESCRIPTION (ATTACH A SKETCH IF APPROPRIATE): Railcar unloading and storage in silo of polyethylene resin. All equipment is equipped with bag house.					DISTANCE TO NEAREST PROPERTY LINE (FT)		
COMPLETE LINES 5 AND 6 IF DIFFERENT FROM THAT ON THE PROCESS OR FUEL BURNING SOURCE DESCRIPTION (APC 21)							
5. NORMAL OPERATION:	HOURS/DAY 24	DAYS/WEEK 7	WEEK/YEAR 52		DAYS/YEAR 365		
6. PERCENT ANNUAL THROUGHPUT:	DEC.-FEB. 25	MARCH-MAY 25	JUNE-AUG. 25		SEPT.-NOV. 25		
7. STACK OR EMISSION POINT DATA:	HEIGHT ABOVE GRADE (FT)	DIAMETER (FT)	TEMPERATURE (°F)	% OF TIME OVER 125°F	DIRECTION OF EXIT (UP, DOWN OR HORIZONTAL)		
DATA AT EXIT CONDITIONS:	FLOW (ACTUAL FT ³ /MIN.) 422	VELOCITY (FT/SEC)	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
DATA AT STANDARD CONDITIONS:	FLOW (DRY STD. FT ³ /MIN)	VELOCITY (FT/SEC)	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
8. AIR CONTAMINANTS	ACTUAL EMISSIONS			EMISSIONS* EST. METHOD	CONTROL DEVICES*	CONTROL EFFICIENCY%	
	EMISSIONS (LBS/HR) AVERAGE	MAXIMUM	CONCENTRATION				AVG. EMISSIONS (TONS/YR)
PARTICULATES	0.010	9.7	**	0.042	3	018	99.9
SULFUR DIOXIDE			***				
CARBON MONOXIDE			PPM				
ORGANIC COMPOUNDS			PPM				
NITROGEN OXIDES			PPM				
FLUORIDES							
OTHER(SPECIFY)							
OTHER(SPECIFY)							

(OVER)

9. CHECK TYPES OF MONITORING AND RECORDING INSTRUMENTS THAT ARE ATTACHED:OPACITY MONITOR (☐), SO2 MONITOR (☐), NOX MONITOR (☐), OTHER (SPECIFY IN COMMENTS) (☐)

10. COMMENTS

The data presented on line 8 is based upon one (1) railcar unloading system operating continuously. The railcar unloading system will operate no more than 1,550 hours per year based on the plant capacity.

11. SIGNATURE**DATE**12/10/2014

* REFER TO THE BACK OF THE PERMIT APPLICATION FORM FOR ESTIMATION METHOD AND CONTROL DEVICE CODES.

** EXIT GAS PARTICULATE CONCENTRATION UNITS: PROCESS — GRAINS/DRY STANDARD FT³ (70°F); WOOD FIRED BOILERS — GRAINS/DRY STANDARD FT³ (70°F); ALL OTHER BOILERS — LBS/MILLION BTU HEAT INPUT.

*** EXIT GAS SULFUR DIOXIDE CONCENTRATIONS UNITS: PROCESS — PPM BY VOLUME, DRY BASES; BOILERS — LBS/MILLION BTU HEAT INPUT.



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ATTACH TO THE PERMIT APPLICATION.

1. ORGANIZATION NAME COLORTECH, INC.				/// FOR APC	APC COMPANY POINT NO.
2. EMISSION SOURCE NO. (FROM APPLICATION) EXT		FLOW DIAGRAM POINT NUMBER		/// APC	APC SEQUENCE NO.
3. LOCATION:	LATITUDE	LONGITUDE	UTM VERTICAL	UTM HORIZONTAL	
4. BRIEF EMISSION POINT DESCRIPTION (ATTACH A SKETCH IF APPROPRIATE): Blending & extrusion w/ baghouse operating 6 distinct processes and 1 emission source.					DISTANCE TO NEAREST PROPERTY LINE (FT)

COMPLETE LINES 5 AND 6 IF DIFFERENT FROM THAT ON THE PROCESS OR FUEL BURNING SOURCE DESCRIPTION (APC 21)

5. NORMAL OPERATION:	HOURS/DAY 24	DAYS/WEEK 7	WEEK/YEAR 52	DAYS/YEAR 365			
6. PERCENT ANNUAL THROUGHPUT:	DEC.-FEB. 25	MARCH-MAY 25	JUNE-AUG. 25	SEPT.-NOV. 25			
7. STACK OR EMISSION POINT DATA:	HEIGHT ABOVE GRADE (FT)	DIAMETER (FT)	TEMPERATURE (°F)	% OF TIME OVER 125°F	DIRECTION OF EXIT (UP, DOWN OR HORIZONTAL)		
DATA AT EXIT CONDITIONS:	FLOW (ACTUAL FT ³ /MIN.) 25,000	VELOCITY (FT/SEC)	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
DATA AT STANDARD CONDITIONS:	FLOW (DRY STD. FT ³ /MIN)	VELOCITY (FT/SEC)	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
8. AIR CONTAMINANTS	ACTUAL EMISSIONS				EMISSIONS* EST. METHOD	CONTROL DEVICES*	CONTROL EFFICIENCY%
	EMISSIONS (LBS/HR) AVERAGE	MAXIMUM	CONCENTRATION	AVG. EMISSIONS (TONS/YR)			
PARTICULATES	0.069		**	0.030	3	018	99.9
SULFUR DIOXIDE			***				
CARBON MONOXIDE			PPM				
ORGANIC COMPOUNDS			PPM				
NITROGEN OXIDES			PPM				
FLUORIDES							
OTHER(SPECIFY)							
OTHER(SPECIFY)							

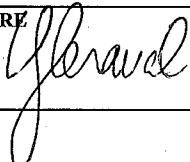
(OVER)

9. CHECK TYPES OF MONITORING AND RECORDING INSTRUMENTS THAT ARE ATTACHED:

OPACITY MONITOR (), SO2 MONITOR (), NOX MONITOR (), OTHER (SPECIFY IN COMMENTS) ()

10. COMMENTS

The data presented on line 8 are based on the 6 distinct processes and 1 emission source running simultaneously with 100% utilization. The utilization will vary based on product mix & customer demand. The average emissions are based on emissions with control equipment working properly and the maximum emissions are based on uncontrolled emissions.

11. SIGNATURE**DATE**

12/10/2014

* REFER TO THE BACK OF THE PERMIT APPLICATION FORM FOR ESTIMATION METHOD AND CONTROL DEVICE CODES.

** EXIT GAS PARTICULATE CONCENTRATION UNITS: PROCESS — GRAINS/DRY STANDARD FT3 (70°F); WOOD FIRED BOILERS — GRAINS/DRY STANDARD FT3 (70°F); ALL OTHER BOILERS — LBS/MILLION BTU HEAT INPUT.

*** EXIT GAS SULFUR DIOXIDE CONCENTRATIONS UNITS: PROCESS — PPM BY VOLUME, DRY BASES; BOILERS — LBS/MILLION BTU HEAT INPUT.



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EMISSION POINT DESCRIPTION

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PLEASE TYPE OR PRINT AND SUBMIT IN DUPLICATE FOR EACH STACK OR EMISSION POINT.
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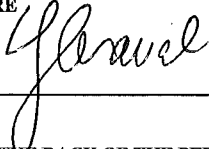
1. ORGANIZATION NAME COLORTECH, INC.				/// FOR	APC COMPANY POINT NO.		
2. EMISSION SOURCE NO. (FROM APPLICATION) RMC-45, -46, -47		FLOW DIAGRAM POINT NUMBER		/// APC	APC SEQUENCE NO.		
3. LOCATION:	LATITUDE	LONGITUDE	UTM VERTICAL		UTM HORIZONTAL		
4. BRIEF EMISSION POINT DESCRIPTION (ATTACH A SKETCH IF APPROPRIATE): Conveying of Raw material (resin, pigment, filler) to surge bins. 3 Processes controlled by baghouses					DISTANCE TO NEAREST PROPERTY LINE (FT)		
COMPLETE LINES 5 AND 6 IF DIFFERENT FROM THAT ON THE PROCESS OR FUEL BURNING SOURCE DESCRIPTION (APC 21)							
5. NORMAL OPERATION:	HOURS/DAY 24	DAYS/WEEK 7	WEEK/YEAR 52		DAYS/YEAR 365		
6. PERCENT ANNUAL THROUGHPUT:	DEC.-FEB. 25	MARCH-MAY 25	JUNE-AUG. 25		SEPT.-NOV. 25		
7. STACK OR EMISSION POINT DATA:	HEIGHT ABOVE GRADE (FT)	DIAMETER (FT)	TEMPERATURE (°F) Ambient	% OF TIME OVER 125°F	DIRECTION OF EXIT (UP, DOWN OR HORIZONTAL)		
DATA AT EXIT CONDITIONS:	FLOW (ACTUAL FT ³ /MIN.) (see attached)	VELOCITY (FT/SEC)	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
DATA AT STANDARD CONDITIONS:	FLOW (DRY STD. FT ³ /MIN)	VELOCITY (FT/SEC)	MOISTURE (GRAINS/FT ³)		MOISTURE (PERCENT)		
8. AIR CONTAMINANTS	ACTUAL EMISSIONS			EMISSIONS* EST. METHOD	CONTROL DEVICES*	CONTROL EFFICIENCY%	
	EMISSIONS (LBS/HR) AVERAGE	MAXIMUM	CONCENTRATION				AVG. EMISSIONS (TONS/YR)
PARTICULATES			**		3	018	99.9
SULFUR DIOXIDE			***				
CARBON MONOXIDE			PPM				
ORGANIC COMPOUNDS			PPM				
NITROGEN OXIDES			PPM				
FLUORIDES							
OTHER(SPECIFY)							
OTHER(SPECIFY)							

(OVER)

9. CHECK TYPES OF MONITORING AND RECORDING INSTRUMENTS THAT ARE ATTACHED:OPACITY MONITOR (☐), SO2 MONITOR (☐), NOX MONITOR (☐), OTHER (SPECIFY IN COMMENTS) (☐)

10. COMMENTS

The data presented on line 8 is based on the 5 processes being used simultaneously. Their utilization depends on the product mix.
The average emissions are based on emissions with control equipment working properly.
The maximum emissions are based on uncontrolled emissions.

11. SIGNATURE**DATE**12/10/2014

* REFER TO THE BACK OF THE PERMIT APPLICATION FORM FOR ESTIMATION METHOD AND CONTROL DEVICE CODES.

** EXIT GAS PARTICULATE CONCENTRATION UNITS: PROCESS — GRAINS/DRY STANDARD FT3 (70°F); WOOD FIRED BOILERS — GRAINS/DRY STANDARD FT3 (70°F); ALL OTHER BOILERS — LBS/MILLION BTU HEAT INPUT.

*** EXIT GAS SULFUR DIOXIDE CONCENTRATIONS UNITS: PROCESS — PPM BY VOLUME, DRY BASES; BOILERS — LBS/MILLION BTU HEAT INPUT.

System Type: **VACUUM PRESSURE PULL-LOAD**
 Material: **OPRANULAR LIPSE RESIN**
 Bulk Density: **25 LBS/50.0 FT³**
 Conveying Rate: **25 LBS/70.0 LBS/HR.**
 No. of Sources: **1**
 No. of Destinations: **1**
 Conveying Distance: **Line Size: 4" 00**
 By Vacuum
 Horizontal: **255 FT.**
 Vertical: **23 FT.**
 No. of Elbows: **(3) 90 DEG.**
 Peak Conveying Rate: **90 FT. PER MIN.**
 Peak Capacity: **Line Size: 3" 00**
 Conveying Distance: **By Pressure**
 Horizontal: **145 FT.**
 Vertical: **54 FT.**
 No. of Elbows: **(4) 90 DEG.**
 Flexible Hose: **10 FT.**



System Type:	VACUUM SEQUENCING
Material:	GRANULAR LIDDE RESIN
Bulk Density:	25 LBS./CU. FT.
Conveying Rate:	4,800 LBS./HR. EACH
No. of Sources:	1
No. of Destinations:	3
Conveying Line Size:	4" OD
Conveying Distances	
Horizontal:	350 FT.
Vertical:	20 FT.
No. of Elbows:	(3) 90 DEG.
Flexible Hose:	5 FT.

System Type: CONTINUOUS VACUUM
Material: CALCIUM CARBONATE OXYCARB FT.
Bulk Density: 45 LBS./CU. FT.
Conveying Rate: 3,250 LBS./HR.
No. of Sources: 1
No. of Destinations: 3
Conveying Line Size: 3 OD 110A CARBON STEEL
Conveying Distances
Horizontal: 125 FT.
Vertical: 20 FT.
No. of Elbows: (5) 90 DEG.
Flexible Hose: 0 FT.

System Type:	VACUUM SEQUENCING
Material:	OFF GRADE COLORED PELLETS
Bulk Density:	35 TO 75 LBS./CU. FT.
Conveying Rate:	1,800 LBS./HR.
No. of Sources:	5
No. of Destinations:	5
Conveying Line Size:	2" OD
Conveying Distances:	
Horizontal:	50 FT.
Vertical:	20 FT.
No. of Elbows:	(3) 90 DEG.
Flexible Hose:	15 FT.

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DUST COLLECTORS**

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High Efficiency **Nanofiber Filters** Built to Last

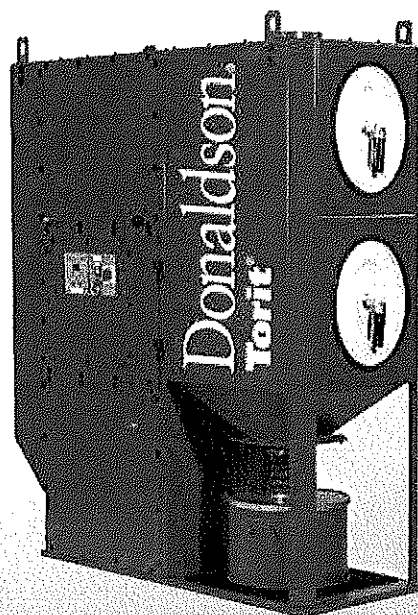
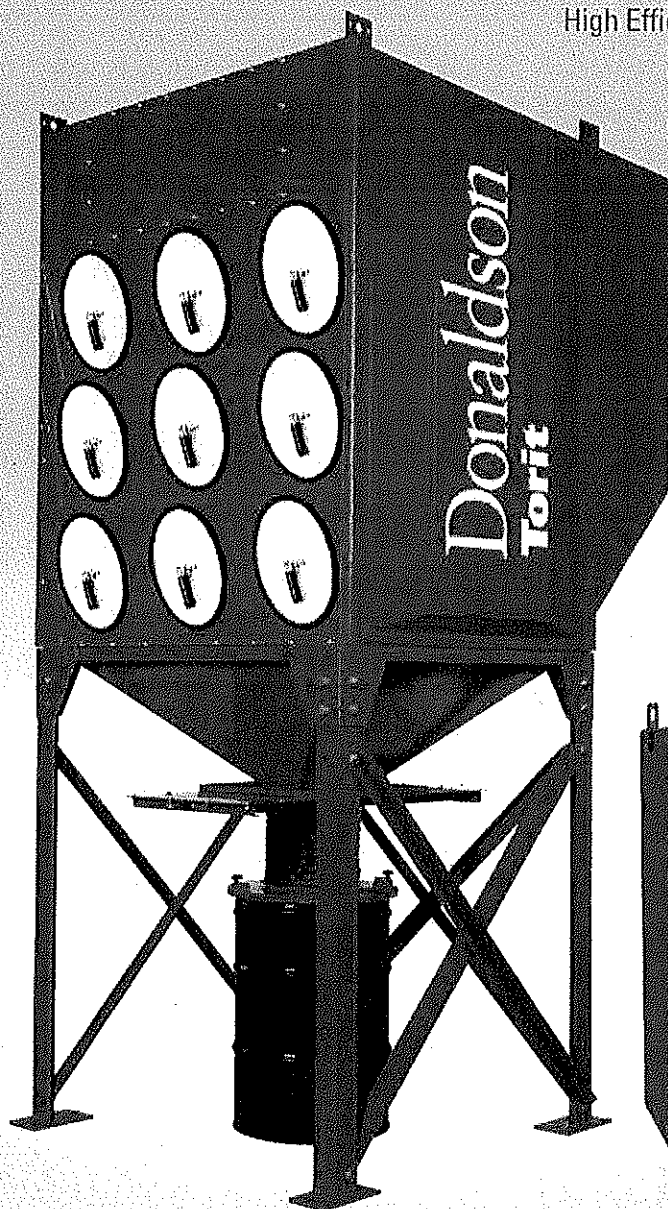


Industrial Air Purification, Inc.

888-372-0050

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A FAMILY OF OVER-ACHIEVERS

The high performance Downflo® Oval (DFO) family of over-achieving dust collectors provides up to 25 percent more filtration capacity than other same-sized cartridge collectors. Powered by proprietary Ultra-Web® nanofiber filtration technology, DFO delivers cleaner air, up to two times longer filter life, and greater cost savings.

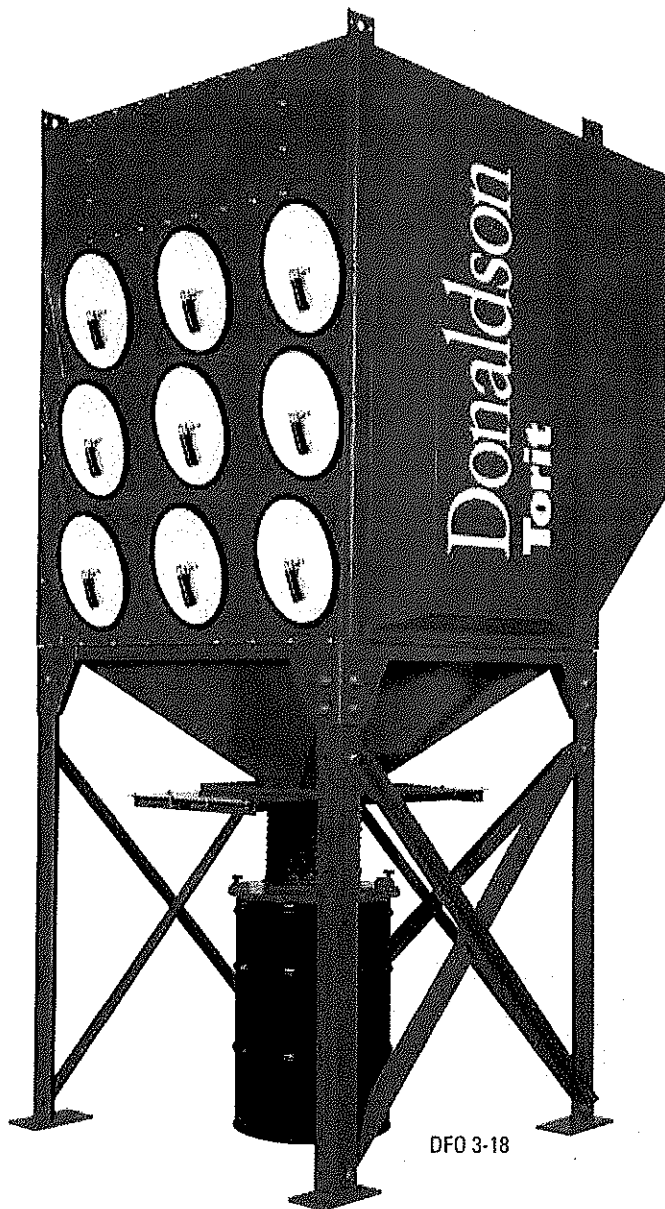
The DFO advantage is found in the collector's proprietary design and components. The combination of a new cabinet design that greatly lowers cabinet velocities, proprietary Extra-Life™ cleaning technology, and proven Ultra-Web nanofiber filters allows more airflow through the collector without increasing the size of the footprint or damaging the filters.

A smaller collector helps lower the initial purchase price, reduces filter replacement costs and opens up valuable manufacturing floor space.

DFO offers:

- Lower initial cost per cubic foot of air per minute
- Higher efficiency—cleaner air
- Lower pressure drop— greater energy savings
- Fewer filter changeouts
- Reduced filter disposal cost
- Easy system setup
- Less maintenance
- 10-year warranty

25%
MORE CAPACITY



OUTPERFORMS ALL OTHER COLLECTORS

DFO collectors offer some strong benefits that distinguish them from all other collectors available in the market today.

EASY TO USE

Quick-release handles provide easy cover removal and faster filter access

COMPACT

Smaller footprints for applications that require maximum cleaning efficiency in even smaller spaces

POWERFUL

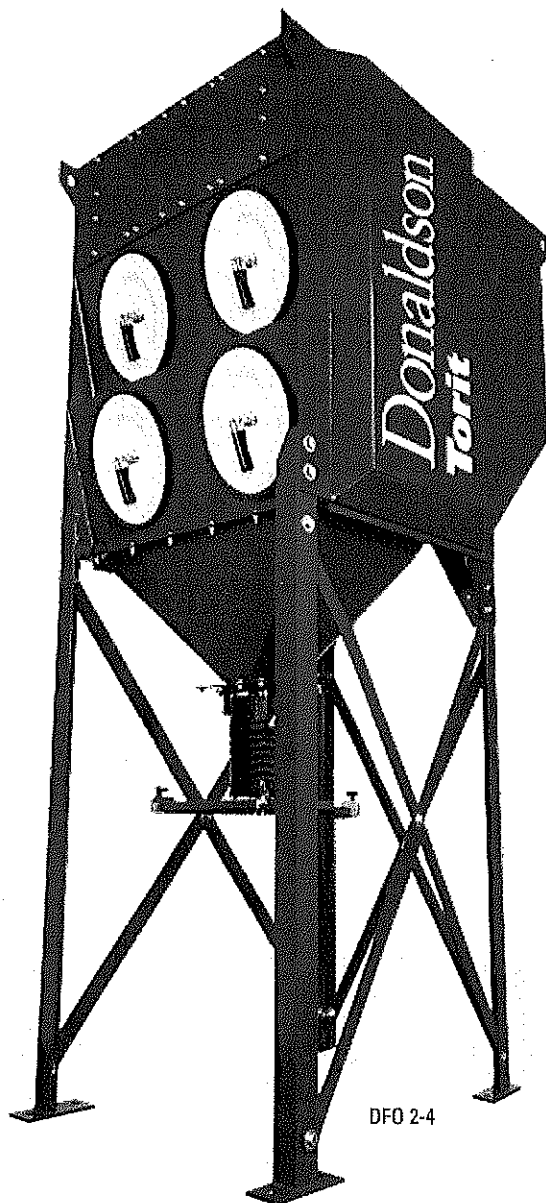
DFO collectors provide 25 percent more capacity than same-sized dust collectors

COST EFFECTIVE

The proprietary ExtraLife™ Filter Cleaning System averages up to 30 percent increase in pulse cleaning energy for unmatched cleaning ability

INNOVATIVE

Unique oval-shaped Ultra-Web® cartridge filters provide the longest filter life and highest filtration efficiency—which lowers cost



DFO 2-4



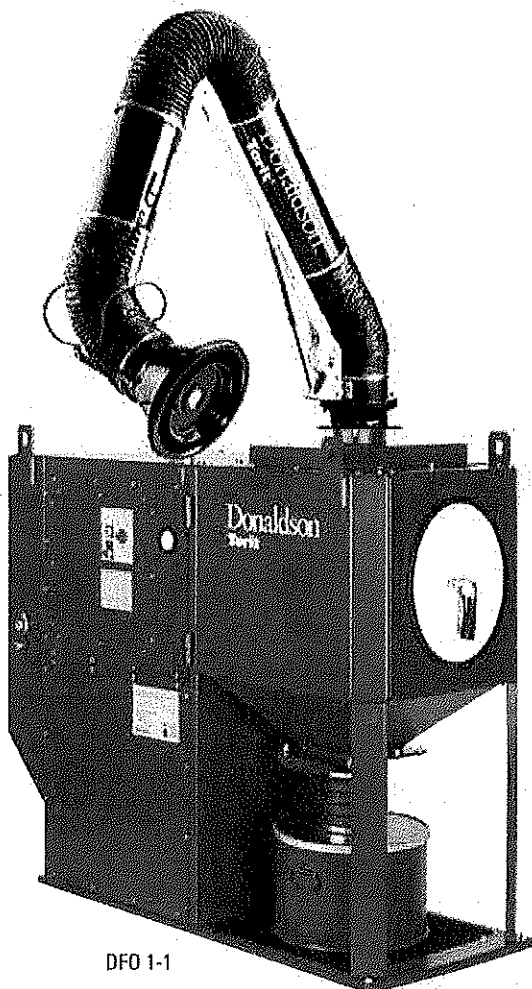
DFO 3-3

SIZES & OPERATIONS

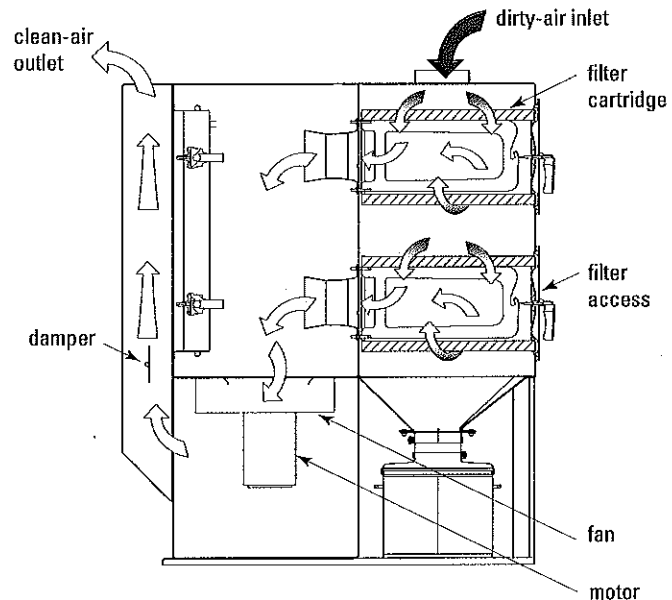
DFO Models 1-1, 2-2 and 3-3

- Incorporate several exclusive and unique features
- Completely self-contained, "plug-and-play" type units
- Packaged with power pack, controls, silencer, damper, dust container and more
- Remarkably quiet operation
- Exceptionally compact design
- Easily movable through standard aisles and doorways

NORMAL OPERATIONS FOR MODELS 1-1, 2-2 AND 3-3



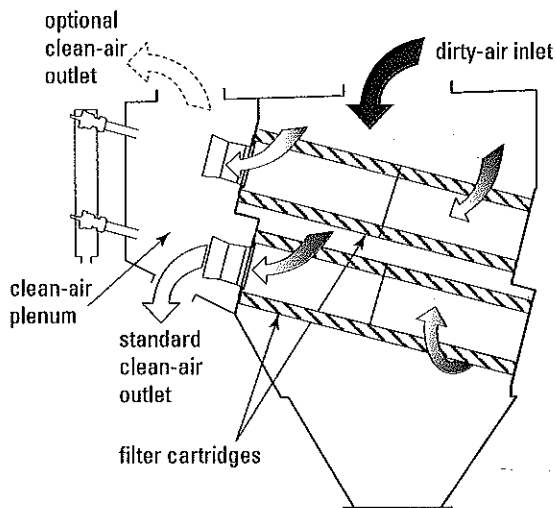
DFO 1-1



DFO Models 2-4 to 4-128

- 23 standard model sizes
- Customized sizes available
- Many options and accessories
- Exceptionally compact design
- Significant energy savings

NORMAL OPERATIONS FOR MODELS 2-4 TO 4-128



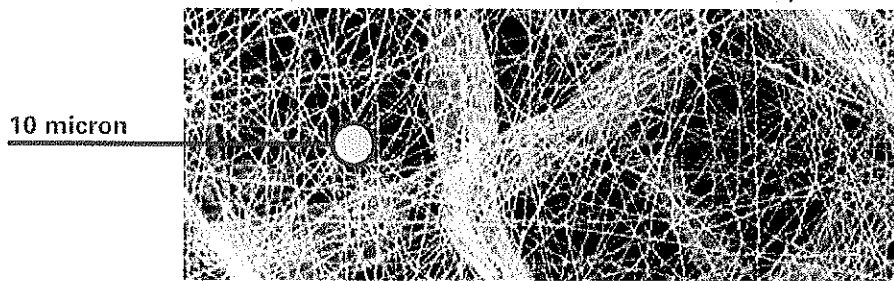
**SIMPLY
THE BEST**
CARTRIDGE COLLECTORS AVAILABLE



CARTRIDGE FILTER TECHNOLOGY

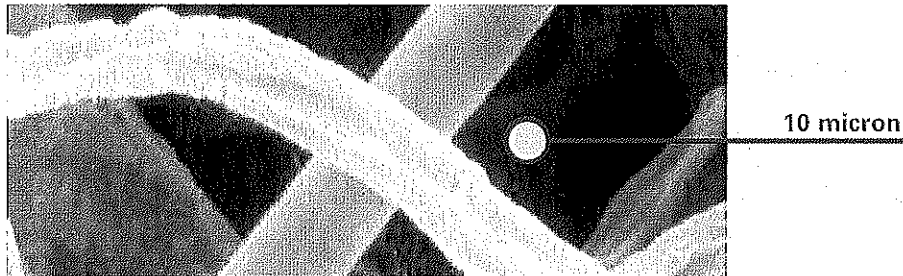
HIGH PERFORMANCE FILTERS

The Downflo Oval filter design is another indication of Donaldson Torit's commitment to technical research and development. The distinguishing factor in our filters is Ultra-Web® filtration technology. Ultra-Web nanofiber media uses a layer of fibers 0.2 to 0.3 microns in diameter to capture contaminants on the surface of the media less than one micron in size. The resulting dust cake is easily cleaned off during the automated collector cleaning cycles providing cleaner air longer, with a minimum MERV* 15 efficiency rating based on ASHRAE 52.2 - 2007 test standards.



Nanofiber Media
(600x)

Nanofiber surface loading technology is available in all Ultra-Web and Fibra-Web filter cartridges.



Commodity Filter Media
(600x)

Conventional media has spaces of up to 60 μm between fibers, allowing dust to become deeply embedded.

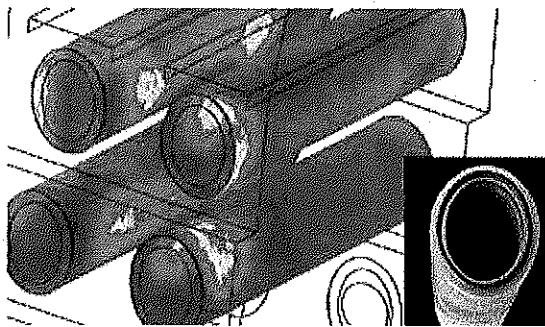
CARTRIDGE FILTERS FOR MANY APPLICATIONS

The Downflo WorkStation in conjunction with Donaldson Torit's unique oval-shaped filter cartridges are an unbeatable system. Choose from our superior line of filters to complete the most powerful filtration solution available for your application.

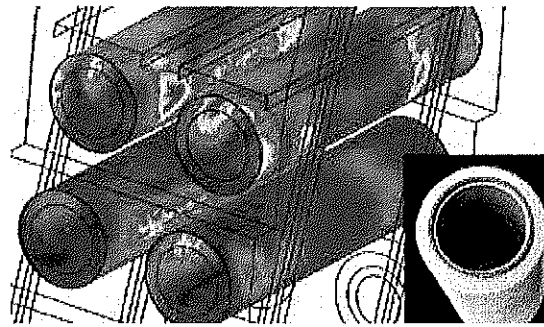
MORE AIRFLOW, LESS FILTER MEDIA

UNIQUE OVAL SHAPE CONTRIBUTES TO HIGHER AIRFLOW CAPACITY

The Downflo Oval filter design is a reflection of Donaldson Torit's commitment to technical research and development. High performance oval-shaped filters handle up to 25 percent more airflow without increasing velocities, which can cause filter abrasion. Sophisticated FLUENT®* Airflow Modeling Software revealed that oval-shaped cartridge filters have fewer areas of high velocity, resulting in a lower potential for media abrasion and increased filter life.



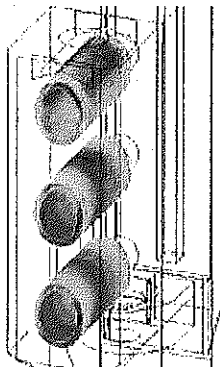
DOWNFLO OVAL COLLECTOR
9145 cfm (15,534 m³/h)



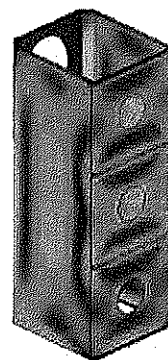
STANDARD COLLECTOR
7315 cfm (12,426 m³/h)

AIRFLOW BREAKTHROUGHS LEAD TO HIGHER FILTRATION EFFICIENCY

Sophisticated computer modeling for fluid dynamics, structural mechanics and acoustics puts DFO models 1-1, 2-2, and 3-3 in a technical class all their own. The illustration below (left) shows how FLUENT Flow Modeling Software enhanced the uniform air velocity distribution through model DFO 3-3. ANSYS®* Structure Analysis Software shown below (right) demonstrates lowest stress levels and deflections for model DFO 3-3 under typical operating pressures.



DFO 3-3 AIR VELOCITY DISTRIBUTION



DFO 3-3 STRESS AND DEFLECTIONS MODEL

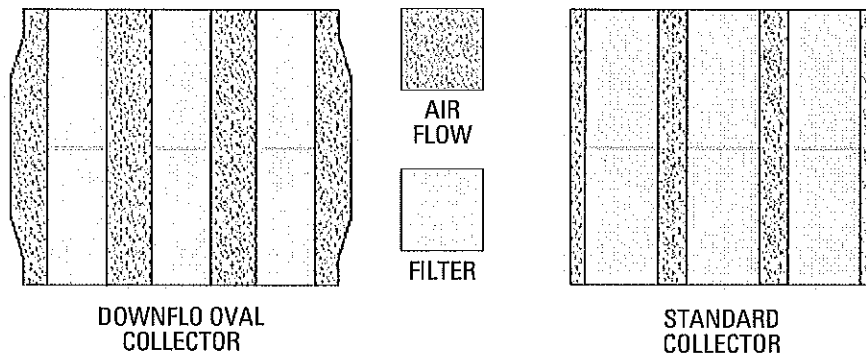
* FLUENT is a registered trademark of Fluent, Inc.; ANSYS is a registered trademark of ANSYS, Inc.

BETTER FILTRATION, PROLONGED FILTER LIFE

CONVEX SIDE WALLS

Technical discoveries improve filtration performance and prolonged filter life. A new cabinet design with convex side walls streamlines the airflow path and increases the cabinet's cross-sectional area. The convex side walls provide more space between filters, lower cabinet velocities and reduce the potential for media abrasion.

SHOWN: CROSS-SECTIONAL AREA OF COLLECTOR DIRTY AIR PLENUM.

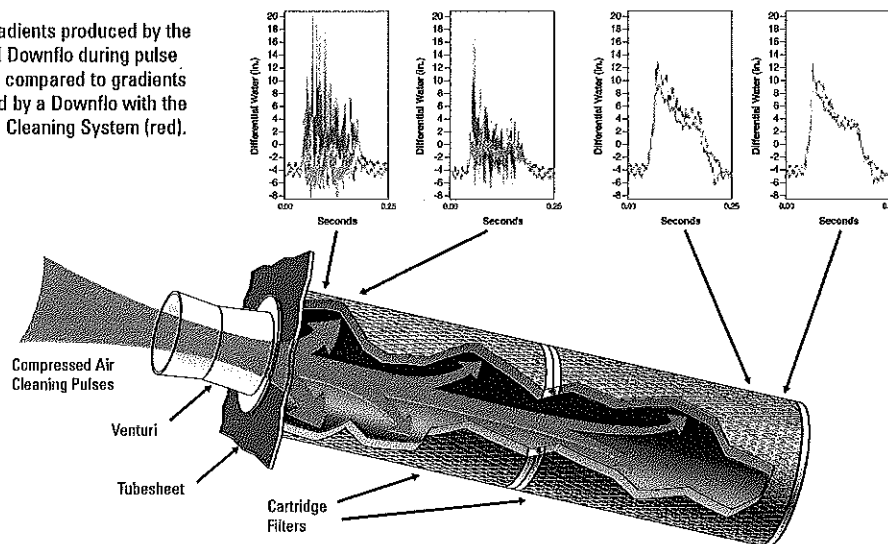


CROSS-SECTIONAL AREAS

PULSE CLEANING TECHNOLOGY

ExtraLife Filter Cleaning System uses proprietary, computer-modeled pulse cleaning technology to easily "pulse off" dust from the surface of the filter, improving filtration efficiency and prolonging filter life. The red lines in the illustration show the increased pressure at the front of the Downflo filter generated by the ExtraLife system. The blue line shows the pulse signature of a standard cartridge collector.

Pulse gradients produced by the standard Downflo during pulse cleaning compared to gradients produced by a Downflo with the ExtraLife Cleaning System (red).

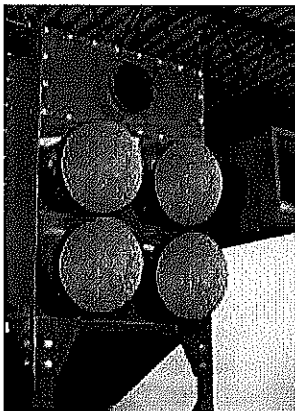
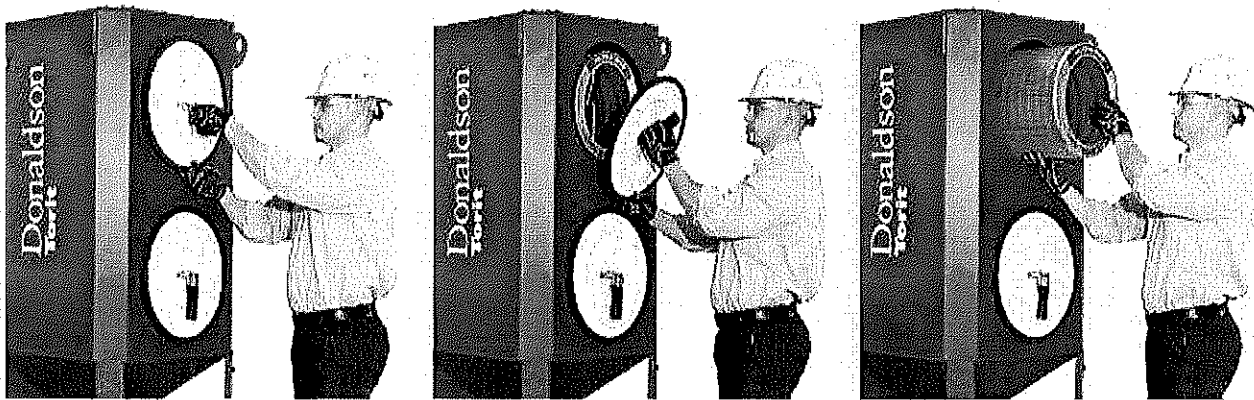


DOWNFLO PULSE PRESSURE GRADIENTS

FILTER CHANGES AND DISCHARGE MAINTENANCE

EASY MAINTENANCE

With the new design of the DFO's quick-release access handles, filter removal and maintenance is extremely fast with one simple movement of the clamp.



BAG-IN/BAG-OUT ARRANGEMENTS

Improve filter changeouts and hopper discharge maintenance, help minimize worker exposure to potentially harmful dusts, and reduce exposure of contaminants to the atmosphere.

- Porthole covers protect changeout bags and provide a clean appearance
- Heavy-duty plastic bags hold filters and function as gloves during the changeout procedure
- Filters are disposed of in a sealed bag
- Bag-in/Bag-Out drum arrangement is safely held in place through drum latches and hose clamps



OPERATING ADVANTAGES & CONDITIONS

DFO MODELS	1-1	2-2	3-3	2-4 THROUGH 4-128
Horsepower (HP)	1.5	3	5	**
Sound Level dB(A)*	68	68	70	**
External Static Pressure (in of H ₂ O/mm of H ₂ O)	***	***	***	**
Housing Construction (gauge)	12	12	12	10 (collector) 7 (tubesheet)
Housing Rating (in of H ₂ O/mm of H ₂ O)	-20/-508	-20/-508	-20/-508	-20/-508
Wind Load Rating (mph/kph)	—	—	—	100 / 161
Seismic Rating (zone)	4	4	4	4
Compressed Air Required (psi/bar)	60/4.1	60/4.1	60/4.1	2-4, 3-6: 60/4.1 2-8 and up: 90-100/6.2-6.9
Electrical Power Valves/Controls	120 VAC, 50/60 Hz	120 VAC, 50/60 Hz	120 VAC, 50/60 Hz	120 VAC, 50/60 Hz

* Sound measurements were taken in a hemianechoic chamber and under free field conditions and do not reflect the influences of actual operating environments. Standard sound pressure levels were taken at an operator position of 1.5 m high and 1 m from source.

** Provided through Donaldson Torit fan program.

*** See system performance curves on page 10.



ADDRESSING SAFETY CONCEPTS

Donaldson Torit manufactures or partners with experts to provide solutions for critical processes where harmful particulate must be controlled.

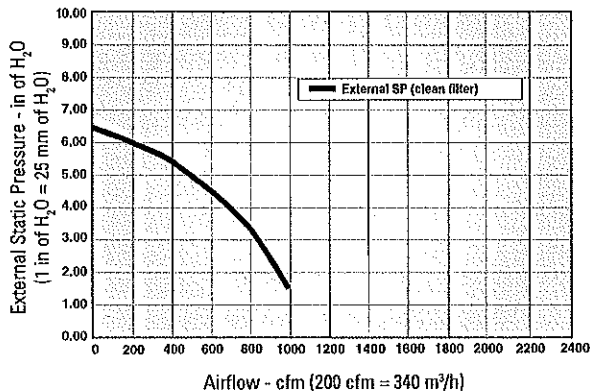
- Explosion Relief Panels
(with or without weather domes)
- Suppression Systems
- Reinforced Housing Construction

SYSTEM CURVES FOR DFO MODELS 1-1, 2-2, AND 3-3

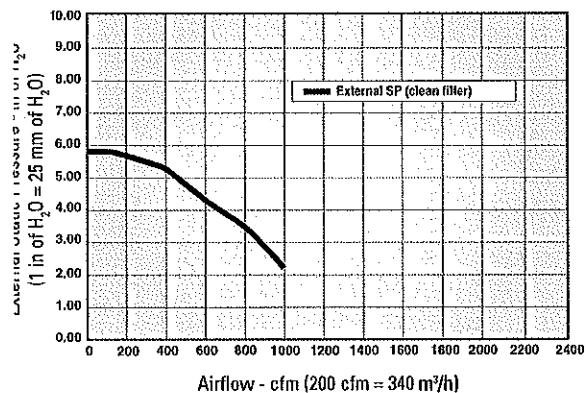
POWERFUL PERFORMANCE

Unlike other technologies that require upgrades for more demanding applications, each DFO 1-1, 2-2 and 3-3 footprint comes standard with a unique high performance power pack. The system performance graphs below show the fan performance with clean filters. The curve indicates available external static pressure to the unit.

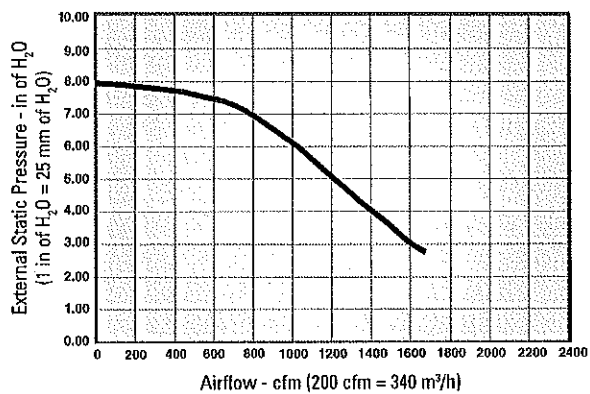
DFO 1-1 1.5HP 60Hz with 6" (152.4 mm) inlet duct (clean filter)



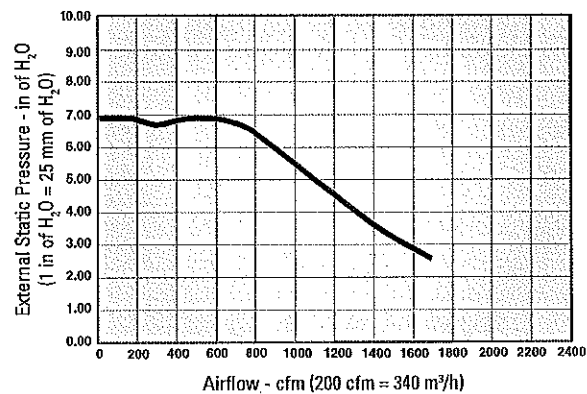
DFO 1-1 1.1kW 50Hz with 6" (152.4 mm) inlet duct (clean filter)



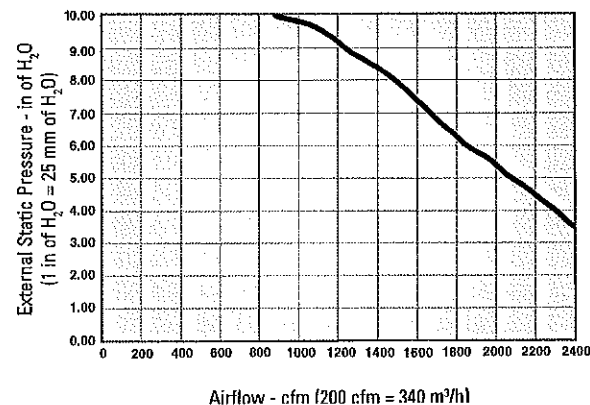
DFO 2-2 3HP 60Hz with 8" (203.2 mm) inlet duct (clean filters)



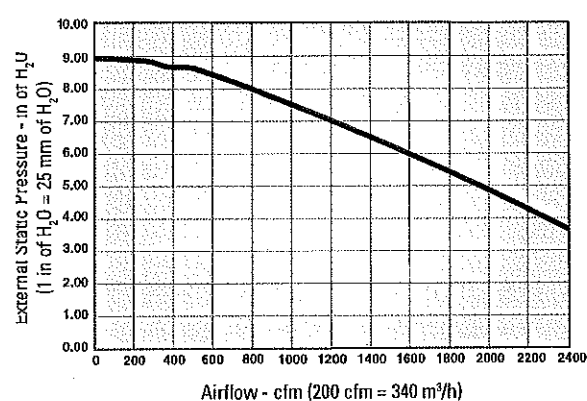
DFO 2-2 2.2kW 50Hz with 8" (203.2 mm) inlet duct (clean filters)



DFO 3-3 5HP 60Hz with 9" (228.6 mm) inlet duct (clean filters)



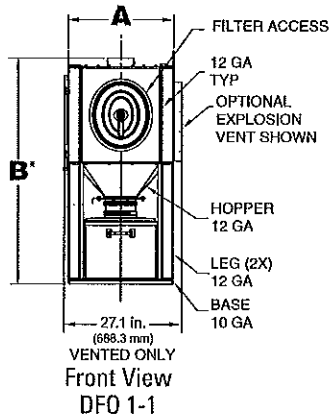
DFO 3-3 4.0kW 50Hz with 9" (228.6 mm) inlet duct (clean filters)



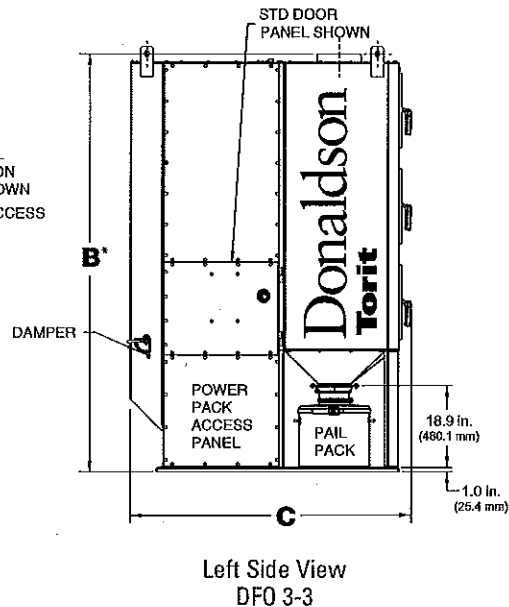
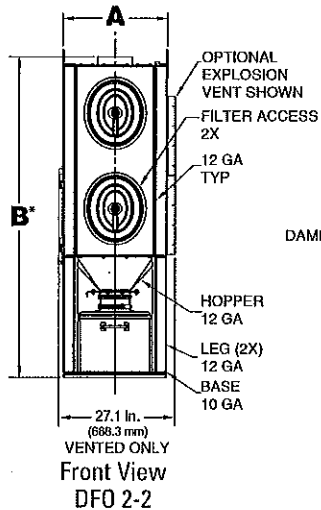
DIMENSIONS & SPECIFICATIONS

BASE MODULES

1-1, 2-2 & 3-3

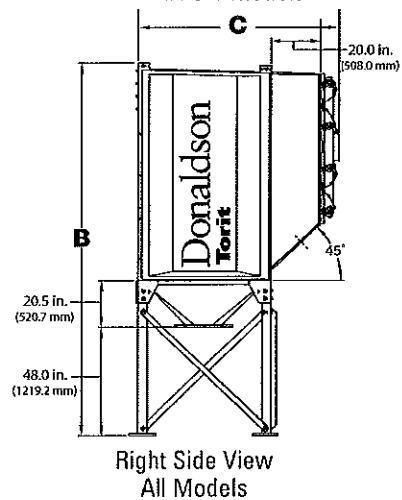
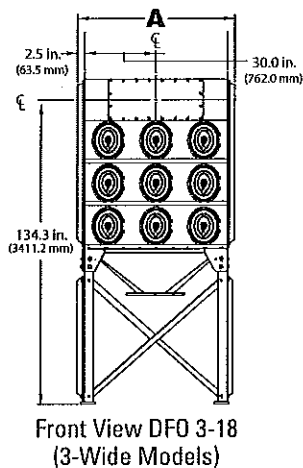
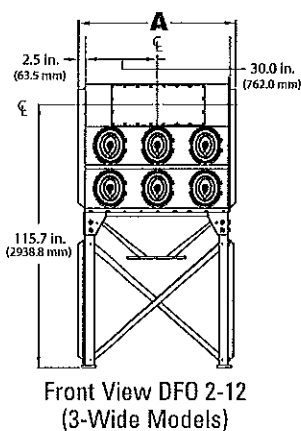
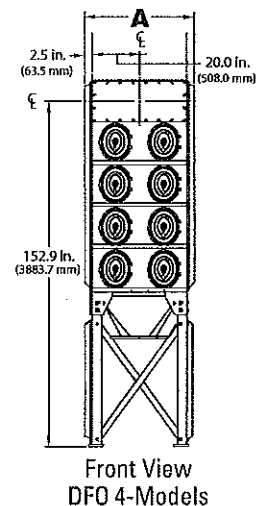
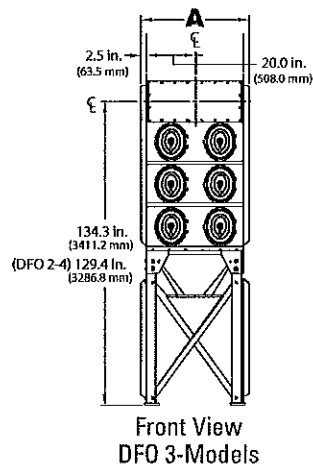
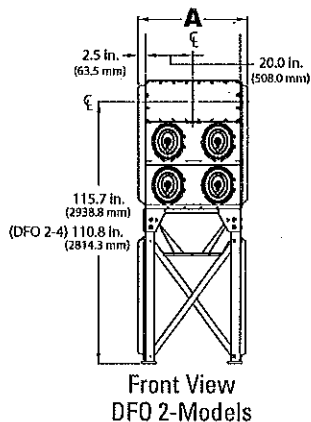


* Top of Inlets.



BASE MODULES

2-4 TO 4-128



DOWNFLO® OVAL DUST COLLECTORS

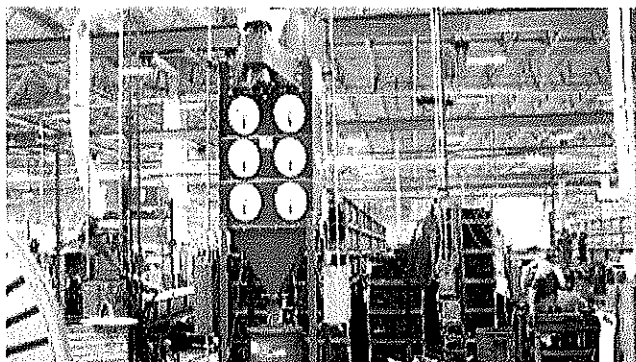
DFT Model*	Nominal Airflow Range**		No. of Filters	Ultra-Web Filter Area		No. of Valves	Approx. Shipping Weight ***		Dimensions					
	cfm	m³/h		ft²	m²		lb	kg	A		B		C	
									in	mm	in	mm	in	mm
1-1	100-800	169.9-1,358.9	1	190	17.7	1	800	362.9	30.0	762.0	52.0	1320.8	65.0	1651.0
2-2	200-1,600	339.7-2,717.8	2	380	35.3	2	1,000	453.6	30.0	762.0	74.0	1879.6	65.0	1651.0
3-3	300-2,400	509.6-4,076.8	3	570	53.0	3	1,300	589.7	30.0	762.0	96.0	2438.4	65.0	1651.0
2-4	380-3,190	645.5-5,418.7	4	760	70.6	4	1,100	499.0	45.0	1143.0	118.8	3017.5	62.0	1574.8
2-8	760-6,380	1,291.0-10,837.4	8	1,520	141.2	4	1,600	725.7	45.0	1143.0	127.8	3246.1	84.0	2133.6
2-12	1,140-9,580	1,936.5-16,273.1	12	2,280	211.8	6	2,100	952.5	65.0	1651.0	127.8	3246.1	84.0	2133.6
2-16	1,520-12,770	2,581.9-21,691.8	16	3,040	282.4	8	3,100	1,406.1	85.0	2159.0	127.8	3246.1	84.0	2133.6
2-24	2,280-19,150	3,872.9-32,529.1	24	4,560	423.6	12	4,200	1,905.1	125.0	3175.0	127.8	3246.1	84.0	2133.6
2-36	3,420-28,730	5,809.4-48,802.2	36	6,840	635.4	18	6,300	2,857.6	185.0	4699.0	127.8	3246.1	84.0	2133.6
3-6	570-4,790	968.2-8,136.5	6	1,140	105.9	6	1,400	635.0	45.0	1143.0	137.4	3490.0	62.0	1574.8
3-10	950-7,980	1,613.7-13,555.2	10	1,900	176.5	5	1,900	861.8	45.0	1143.0	146.5	3721.1	85.3	2166.6
3-12	1,140-9,580	1,936.5-16,273.1	12	2,280	211.8	6	2,000	907.2	45.0	1143.0	146.5	3721.1	85.3	2166.6
3-18	1,710-14,370	2,904.7-24,409.6	18	3,420	317.7	9	2,800	1,270.1	65.0	1651.0	146.5	3721.1	85.3	2166.6
3-24	2,280-19,150	3,872.9-32,529.1	24	4,560	423.6	12	3,300	1,496.9	85.0	2159.0	146.5	3721.1	85.3	2166.6
3-36	3,420-28,730	5,809.4-48,802.2	36	6,840	635.4	18	6,100	2,766.9	125.0	3175.0	146.5	3721.1	85.3	2166.6
3-48	4,560-38,300	7,745.8-65,058.3	48	9,120	847.2	24	8,100	3,674.1	165.0	4191.0	146.5	3721.1	85.3	2166.6
3-60	5,700-47,880	9,682.3-81,331.4	60	11,400	1,059.1	30	10,100	4,581.3	205.0	5207.0	146.5	3721.1	85.3	2166.6
3-72	6,840-57,460	11,618.8-97,604.4	72	13,680	1,270.9	36	12,100	5,488.5	245.0	6223.0	146.5	3721.1	85.3	2166.6
4-16	1,520-12,770	2,581.9-21,691.8	16	3,040	282.4	8	2,400	1,088.6	45.0	1143.0	165.1	4193.5	85.3	2166.6
4-32	3,040-25,540	5,163.9-43,383.5	32	6,080	564.8	16	4,200	1,905.1	85.0	2159.0	165.1	4193.5	85.3	2166.6
4-48	4,560-38,300	7,745.8-65,058.3	48	9,120	847.2	24	7,400	3,356.6	125.0	3175.0	165.1	4193.5	85.3	2166.6
4-64	6,080-51,070	10,327.8-86,750.1	64	12,160	1,129.7	32	9,100	4,127.7	165.0	4191.0	165.1	4193.5	85.3	2166.6
4-80	7,600-63,840	12,909.7-108,441.8	80	15,200	1,412.1	40	11,000	4,989.5	205.0	5207.0	165.1	4193.5	85.3	2166.6
4-96	9,120-76,800	15,491.7-130,116.6	96	18,240	1,694.5	48	12,600	5,715.3	245.0	6223.0	165.1	4193.5	85.3	2166.6
4-112	10,640-89,380	18,073.6-151,825.3	112	21,280	1,976.9	56	14,500	6,577.1	285.0	7239.0	165.1	4193.5	85.3	2166.6
4-128	12,160-102,150	20,655.6-173,517.1	128	24,320	2,259.3	64	16,100	7,302.8	325.0	8255.0	165.1	4193.5	85.3	2166.6

* The first number indicates number of filter rows, and the second number indicates number of cartridges.

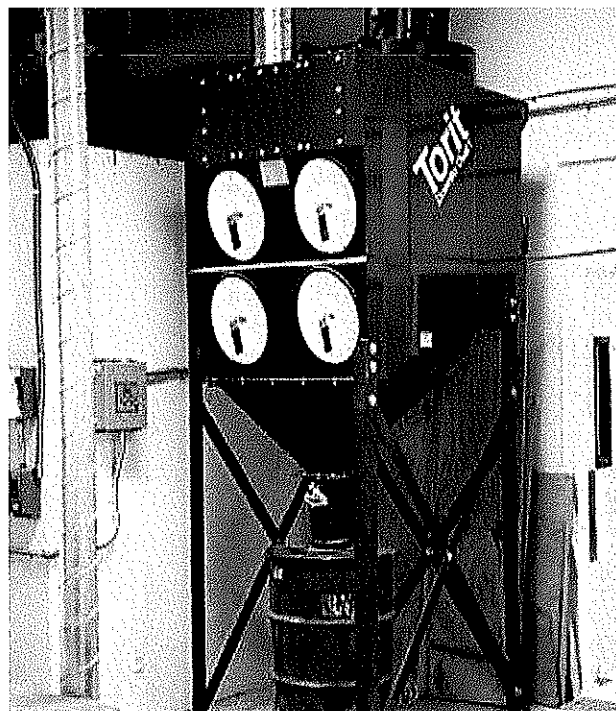
** Based on clean filters.

*** Without accessories or optional equipment.

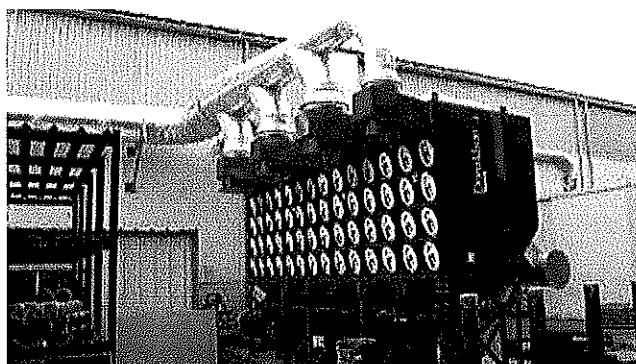
PROVEN PERFORMANCE ON HUNDREDS OF APPLICATIONS



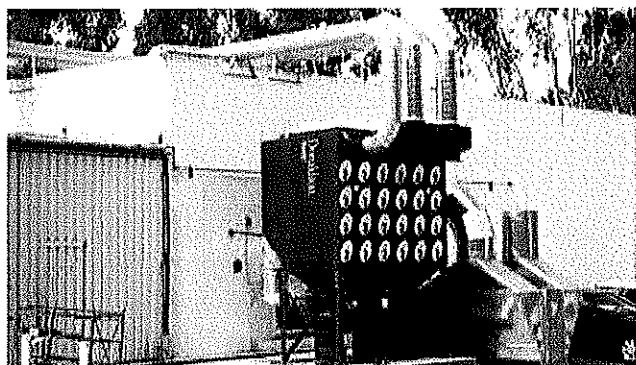
DFO 3-6 on Sawing of High Pressure Hydraulic Hose



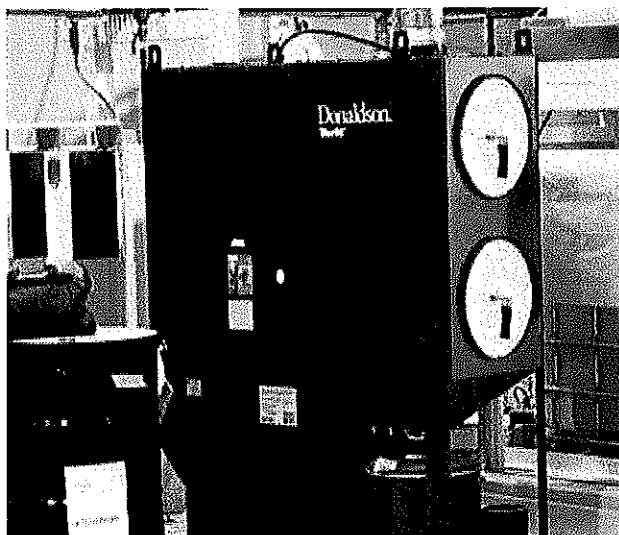
DFO 2-4 on Fiberglass Routing & Cutting



DFO 4-112 on Titanium Grinding



DFO 4-48 on Metal Grinding



DFO 2-2 on Paint Pigment Dust

STANDARD FEATURES & AVAILABLE OPTIONS

DFO 1-1, 2-2, 3-3

Collector Design	Std	Opt
Mild Steel Construction	X	
Integral High Performance Power Packs	X	
Ledge-Free Hopper	X	
Inlet	X	
Sprinkler Taps	X	
ExtraLife™ Filter Cleaning System	X	
Quick-Removal Access Covers	X	
Integral Exhaust Silencer	X	
Airflow Damper	X	
Stainless Steel Construction		X
Explosion Protected Models		X
High Static Power Packs		X
Inlet Damper		X
Abrasion Resistant (AR) Inlet		X
Sprinkler Heads		X
Extraction Arms (7', 10', 14')		X
Caster Packs		X
Bag-Out Kit (Filter & Discharge)		X
Bag-In/Bag-Out Kit (Filter & Discharge)		X
Cartridge Filters		
Ultra-Web® (MERV* 15)	X	
Fibra-Web® (MERV 14); Ultra-Tek® (MERV 12); Thermo-Web® (MERV 14); Torit-TEX™ (MERV 16)		X
HEPA/ASHRAE Afterfilters		X
Paint System		
Textured Multi-Coat Paint Finish with 2,000-Hour Salt Spray Performance	X	
Custom Color		X
Premium Duty Finish		X
Epoxy Coating		X
Hopper Discharge		
10-Gallon (37.9-Liter) Pail Pack	X	
10-Gallon (37.9-Liter) Pail Pack with Sealer Gear		X
25-Gallon (94.6-Liter) Dust Container		X
Electrical Controls, Gauges & Enclosures		
Minihelic*** Gauge	X	
Manual or Automated Downtime Cleaning	X	
Solenoid Enclosure in NEMA 12	X	
Continuous On-Demand Delta P Control		X
Solenoid Enclosure NEMA 9		X
Starter Controls		X
Warranty		
10-Year Warranty	X	

* The Minimum Efficiency Reporting Value (MERV) of this filter cartridge has been determined through independent laboratory testing using ASHRAE 52.2 (2007) test standards. The MERV rating was determined at a face velocity of 118 feet (36.0 m) per minute and loading up to four inches (101.6 mm) water gauge. Actual efficiency of any filter cartridge will vary according to the specific application parameters. Dust concentration, airflow, particle characteristics, and pulse cleaning methods all affect filtration efficiency.

** Minihelic, Magnehelic and Photohelic are registered trademarks of Dwyer Instruments, Inc.

DFO 2-4 TO 4-128

Collector Design	Std	Opt
Mild Steel Construction	X	
ExtraLife™ Filter Cleaning System	X	
Quick-Removal Access Covers	X	
Inlets	X	
Ledge-Free Hopper	X	
Sprinkler Taps	X	
Stainless Steel Construction		X
High Temperature Construction		X
Explosion Protected Models		X
Direct Drive Fans		X
Chamber and Exhaust Silencers		X
Abrasion Resistant (AR) Inlet		X
Air Management Modules		X
Extended Dirty Air Plenum		X
Steep-Sided Hopper		X
2-Mod Hopper		X
Sprinkler Heads		X
Service Platform (OSHA compliant)		X
Damper Pack		X
Drum Sentry™ Drum-Full Indicator		X
Lined Clean Air Plenum		X
Bag-Out Kit (Filter & Discharge)		X
Bag-In/Bag-Out Kit (Filter & Discharge)		X
Cartridge Filters		
Ultra-Web® (MERV* 15)		X
Fibra-Web® (MERV 14); Ultra-Tek® (MERV 12); Thermo-Web® (MERV 14); Torit-TEX™ (MERV 16)		X
HEPA/ASHRAE Afterfilters		X
Paint System		
Prime Coated Interior		X
Textured Multi-Coat Paint Finish with 2,000-Hour Salt Spray Performance		X
Custom Color		X
Premium Duty Finish		X
Epoxy Coating		X
Hopper Discharge		
Drum Cover and Hose		X
Slide Gates		X
Rotary Valves and Transitions		X
Screw Conveyors		X
Electrical Controls, Gauges & Enclosures		
Control Box w/Timer in NEMA 4 Enclosure		X
Magnehelic*** Gauge Controls		X
Delta P Control, Delta P Plus Control		X
Dustronix™ Control Assembly		X
Custom Panels		X
Photohelic*** Gauge Standard and Weatherproof		X
Basic Cold Climate Kit		X
Heavy-Duty Cold Climate Kit		X
Solenoid Enclosure (NEMA 7 & 9)		X
Warranty		
10-Year Warranty		X

Railcar unloading (P2-RUS-01):

P2-RUS-01. This rail car unloading system consists of a vacuum conveying system and a pressure conveying system. The vacuum side has two levels of filtration. The emission stack is the exhaust of the vacuum blower. Uncontrolled emissions are not possible as it would seize the vacuum blower.

On the pressure side, the conveying flow rate is 422cfm. As such the combined uncontrolled emissions would be:

Using 0.25 grain/ft³, emissions=0.25x422x8760x60x0.000047623/2000
=1.32 t/yr.

The capacity of the plant will be 25,000,000 lb. The amount of resin used is approx. 31% of the total capacity. If we assume that our future consumption is 2 times greater or 15,500,000 lb, the system would be used no more than 1,550 hours per year.

Our uncontrolled emissions based on the process weight loading would then be:
[3.59x(10,000²/2,000)^{0.62}]=12.05 lb/h or 9.70 t/yr.

The resin is conveyed up to a storage silos equipped with high efficiency dust collector capable of over 99.9% filtration. The resulting emission will be 0.009 t/yr based on process weight loading or 0.001 t/yr based on process flow rate.

Raw material conveying (RMC-01 & -02):

RMC-01 & -02 are vacuum-only conveying systems used to convey resin and calcium carbonate. Each system has two levels of filtration to protect the vacuum blower. Uncontrolled emissions are not possible as the vacuum blower can not operate in presence of particulates. The intake and exhaust locations of both systems are located inside the building

Blending & Extrusion (EXT):

A dust collector, with a capacity of 25,000 cfm, will be installed to capture any dust generated during the blending and extrusion activities. The dust collector is capable of over 99.9% removal of particles from the air stream. This new plant will produce approximately 25,000,000 lb/yr.

The quantity of dust recovered through the dust collector will typically range from 0.09% to 0.4% of the raw material quantities processed. This is based on data collected at plant 1, which runs a similar process. Assuming a worst case scenario of 1.2% for EXT and a maximum plant capacity of 50 million lbs/yr,(twice the projected capacity) the amount that would be released through the dust collector would be 0.30 t/yr.

Uncontrolled emissions would be:

Assuming 50,000,000 lbs/yr x 1.2% dust captured.

Assuming 68% utilization or 5723 lbs/hr.

The dust captured per hour is 5723lbs/hr x 0.012 = 69 lbs/hr

The dust collector is capable of greater than 99.9% filtration and as such, the potential controlled emissions would be 0.069 lbs/hr or 0.30 t/yr

Air permit / Calculation sheet

Reference:

Emission Source	Process	Maximum Process rate (lb/h)	Exhaust
Yes	P2-RUS-01	10,000	Outside
	RMC-01 - Resin	9,600	Inside
	RMC-02 – CaCO ₃	3,280	Inside
Yes	EXT (Dust collection)	NA	Outside
	EXT-42	200	NA
	EXT-43	200	NA
	EXT-44	2,000	NA
	EXT-45	2,000	NA
	EXT-46	2,000	NA
	EXT-47	2,000	NA